2001 National Survey of Hospital Coagulation Laboratory Practices: Tests for von Willebrand Disease (vWD), Thrombosis/Hypercoagulability, and Lupus Anticoagulant (LA) AK Stankovic, MD, PhD; S Shahangian, PhD; IM Lubin, PhD; JH Handsfield, MPH; MD White, BS

<u>Introduction</u>: Coagulopathy and bleeding are major public health concerns, and coagulation laboratory tests are principal components of clinical management. To characterize, among other issues, practices relating to tests for vWD, thrombosis or hypercoagulability, and LA, we conducted a survey of laboratories in 2001.

<u>Methods</u>: From a sampling frame of institutions listed in the 1999 directory of the American Hospital Association, we randomly selected 800 hospital coagulation laboratories (sampling rate, 14%; response rate, 79%). A group of coagulation experts and survey methodologists assisted in survey design and further evaluated content and format of the survey before pilot testing.

<u>Results</u>: Ninety-seven percent of sampled hospitals performed coagulation testing. <u>vWD</u>. Six percent of respondents provided results for von Willebrand factor (vWF) antigen, and 7% provided results for vWF activity. Two percent of respondents provided results for vWF multimers. Nineteen percent of respondents that performed vWF antigen assay reported an ABO specific reference interval for this assay.

<u>Thrombosis or hypercoagulability</u>. Five percent of respondents usually performed an assay for protein S activity (functional test) before antigenic assay. If results of the functional test were decreased, 17% performed an antigenic assay to differentiate Type I deficiency from Type II while 20% performed free and total protein S antigen assays. Six percent of respondents performed activated protein C (APC) resistance assay. If after performing APC resistance assay, results indicated resistance to APC, 61% obtained results for factor V Leiden mutation.

<u>LA</u>. Eighteen percent of respondents offered an LA profile. If the results of a mixing study for aPTT did not correct to normal, 17% of respondents routinely initiated workup to diagnose an LA

<u>Conclusion</u>: We found substantial variability among some laboratory practices for those performing tests for vWD, thrombosis or hypercoagulability, and LA. Less than 20% of the respondents reported performing these assays.